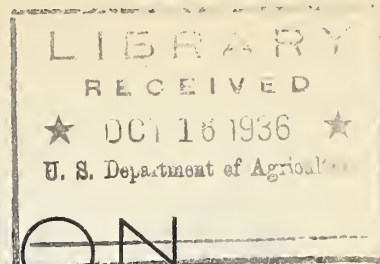


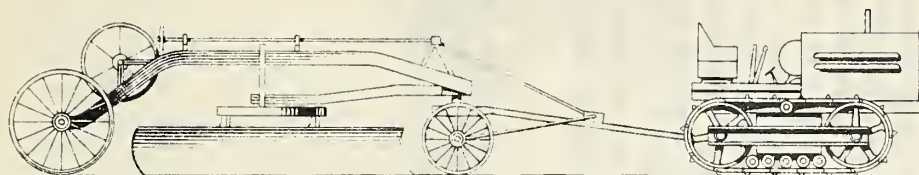
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

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776ch



CONSTRUCTION



HINTS

UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE
WASHINGTON, D. C.

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No. 19

SIMPLE ELECTRIC SOLDERING IRON

Submitted by Gilbert Sykes, Forest Ranger, Huachuca District

This simple electrical field soldering iron is very useful in use on telephone work and other light soldering work that is often necessary in the field.

The construction of the outfit is very simple and is made as follows:

Carefully dismantle an old regular dry cell, such as used in telephones, taking care that the clip or binding post is not damaged. Connect a wire to this post and mount a large clip on the other end of this wire, large enough to clip onto the post of a car storage battery. Sharpen the carbon electrode like a pencil. Attach two more large clips to the ends of a second wire, one end being then clipped to the negative side of the car battery and the other to the object to be soldered. All that is necessary now is to bring the carbon electrode in contact with the object to be soldered and an arc will result of sufficient heat to make the soldering job very easy.

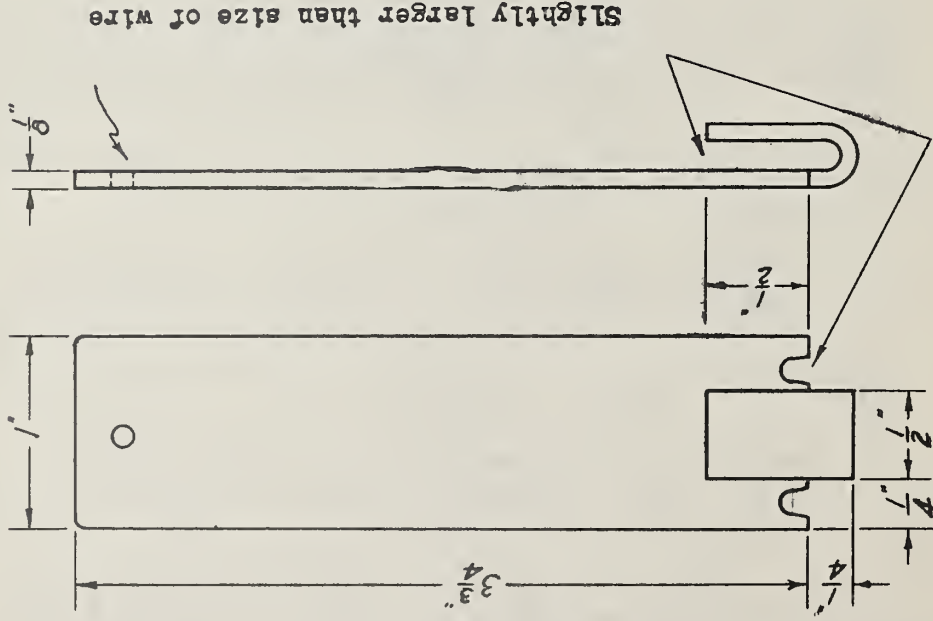
It is best that the wires be made plenty long, say ten or twelve feet, so that they will readily reach from the car battery to the object that one wishes to work on.

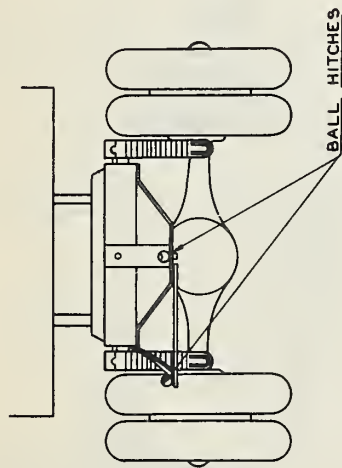
(over)

LINESMAN'S TOOL FOR TYING LINE WIRE TO INSULATOR

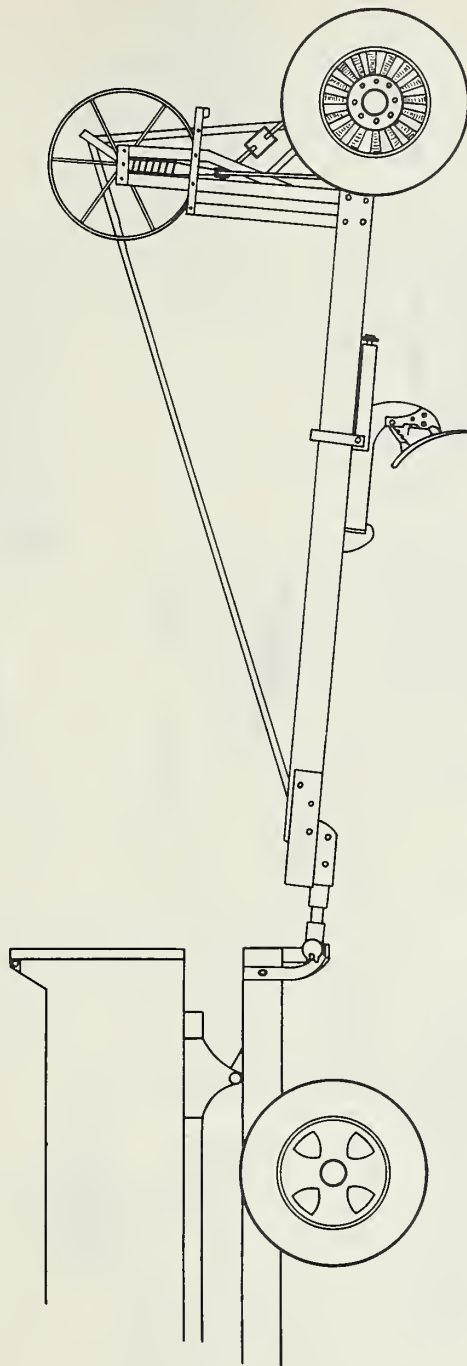
In making a tie to an insulator the tie-wire is first put around the insulator and given a half-turn around the line wire by hand. The "U" shaped end is then slipped over the line wire with the loose end of the tie wire fitting in one of the grooves. The tool is then twisted around the line wire with the hand until the desired number of wraps is secured. The upper end of the tool may also be used. When this is used the tie wire is run through the hole and the tool is turned around the line wire as with the other end of the tool. This end of the tool gives a slightly looser wrap than the "U" end.

Dimensions may be changed to suit the conditions under which the tool is used. The tool has been used for a number of years by different telephone companies in Virginia.

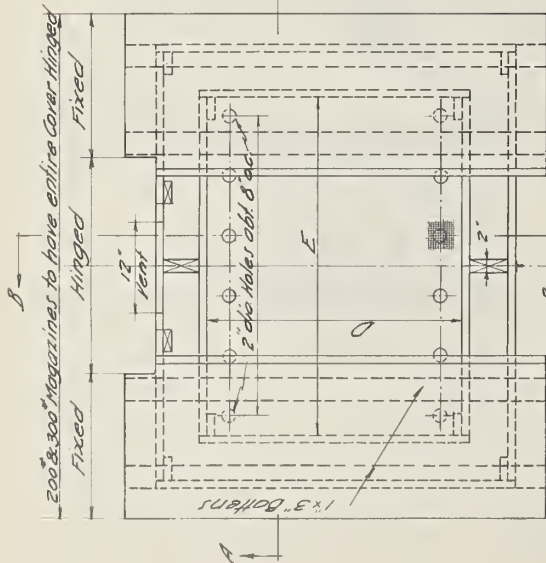




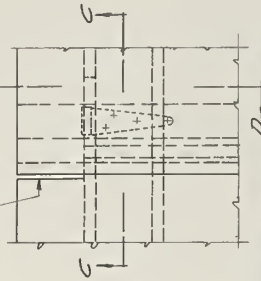
NOTE - THIS RIG WAS CONSTRUCTED FROM A 4-HORSE GRADER.
 THE FRONT ASSEMBLY WAS REMOVED AND A BALL HITCH ATTACHED
 SO THAT IT COULD BE PULLED BY A TRUCK.
 THE REAR AXEE WAS FITTED WITH RUBBER TIRED WHEELS.
 THE TRUCK HAS TWO HITCHES; ONE FOR PATROLLING THE
 SHOULDER AND THE OTHER FOR THE CENTER OF THE ROAD.



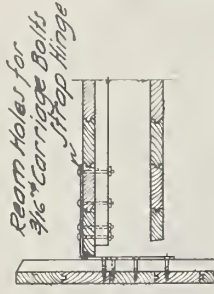
Developed by Wisconsin State E.C.W. - 1936.



Fixed Cover cut away to clear Hinged Cover



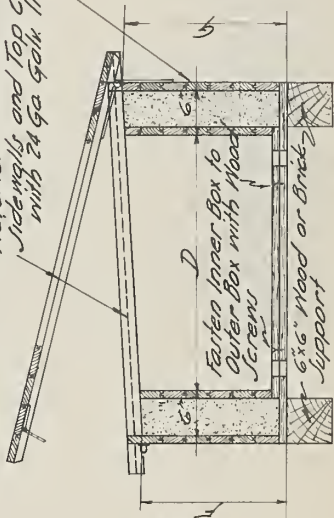
2" hole in inner box



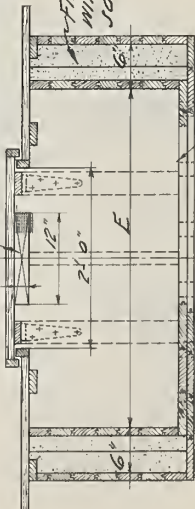
MAGAZINE SIZES

Inside Dimension	Live/Grades of Dynamite and Powder in each Package				
	200#	300#	500#	750#	1050#
D	20"	20"	34"	54"	30"
E	32"	45"	45"	45"	60"
F	19"	19"	19"	28"	28"
G	22"	22"	22"	32"	32"

Magazines made of 7/8" T&G Material. Sidelings and Top Covered with 24 ga Galk Iron



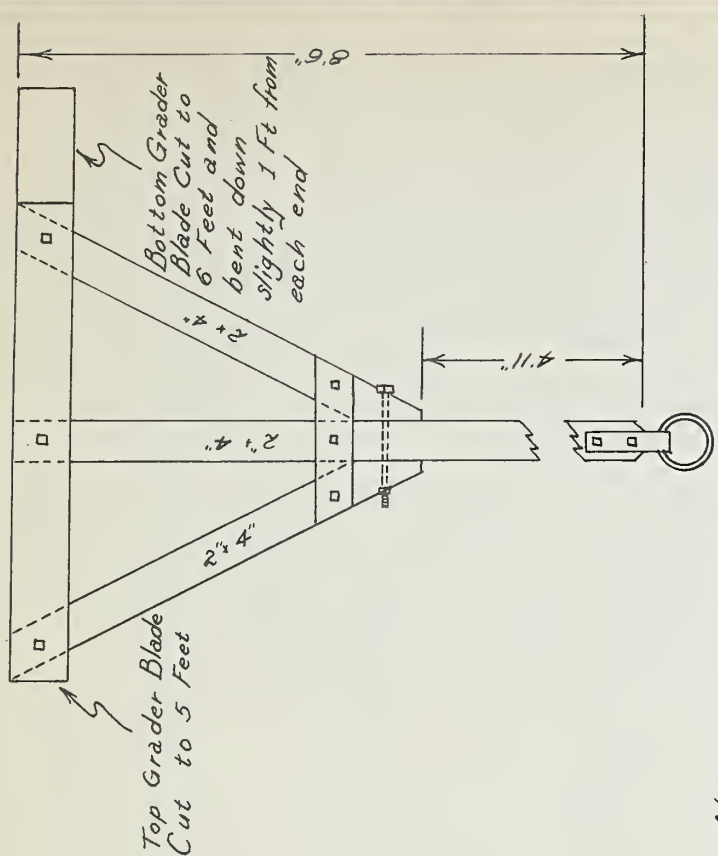
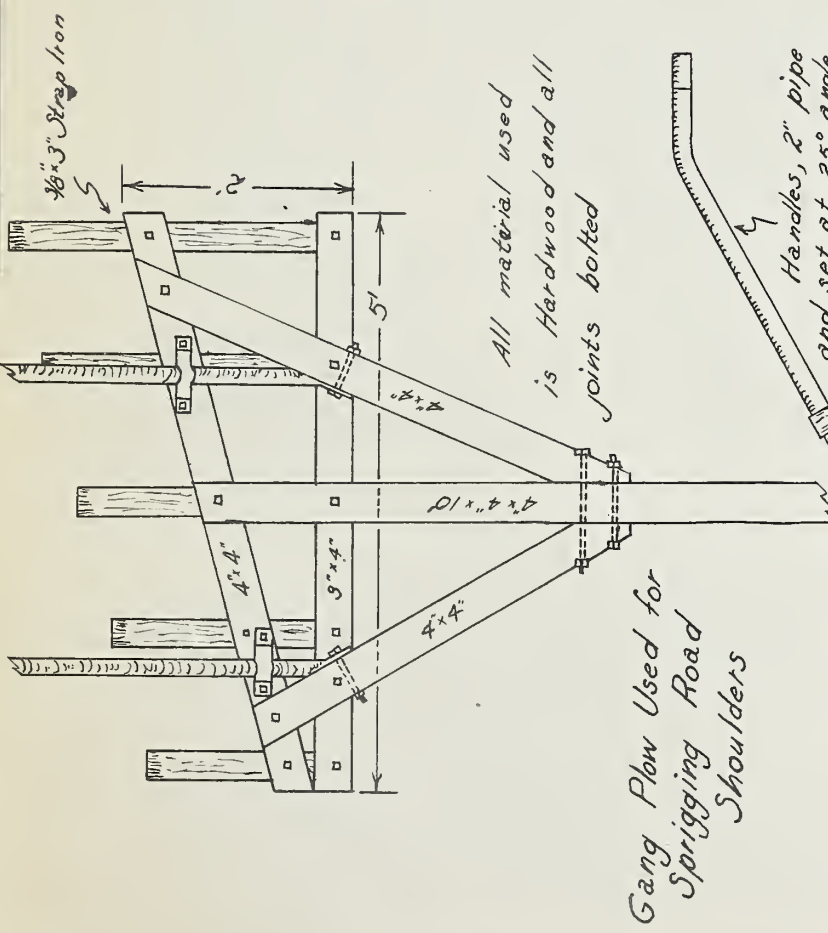
12x2" kept covered with 16 Mesh Copper Screen



U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION 8
R. E. PIDGEON, REG. ENGR.

PORTABLE BOX MAGAZINE
FOR CAMP STORAGE

DESIGNED BY... TRACED BY...
SCALE... CHECKED...
APPROVED... DATE...



Note:-

Both plow and cover are hooked to a beam which in turn is fastened high enough on a truck to clear bridge rails and culvert posts. Pull plow with long point on down hill side. Plow is pulled with an offset hitch which permits truck to remain on the surface of the road. Crew of 7 men required.

Handles, 2" pipe and set at 25° angle

Bolt, clamps strap-to handle

4" Scooter Plow Point Welded

FLORIDA NATIONAL FOREST APALACHICOLA DISTRICT

